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PPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/682,039	07/12/2001		Brendan J. Kitts	VIGN1130	6148
44654	7590	07/06/2005		EXAMINER	
SPRINKL			GRAYSAY, TAMARA L		
1301 W. 25 SUITE 408		E I	ART UNIT	PAPER NUMBER	
AUSTIN, 7	AUSTIN, TX 78705			3623	
				DATE MAILED: 07/06/2009	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	•	Application No.	Applicant(s)					
	Office Action Cummons	09/682,039	KITTS, BRENDAN J.					
	Office Action Summary	Examiner	Art Unit					
		Tamara L. Graysay	3623					
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
THE N - Extending after S - If the If NO - Failur Any re	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing ad patent term adjustment. See 37 CFR 1.704(b).	within the statutory minimum of thirty (30) days a reply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status								
1)	Responsive to communication(s) filed on	_• ·						
2a) <u></u> ☐	This action is FINAL. 2b)⊠ This action is non-final.							
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition	on of Claims							
,)⊠ Claim(s) <u>1-18</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.							
5)[5) Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>1-18</u> is/are rejected.							
	Claim(s) is/are objected to.	·						
8)[^	Claim(s) are subject to restriction and/or	election requirement.						
Application	on Papers							
9)[2] -	The specification is objected to by the Examiner	۲.						
10)⊠ The drawing(s) filed on <u>12 July 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) 🔲 -	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority u	nder 35 U.S.C. § 119							
12) 🗌 /	Acknowledgment is made of a claim for foreign All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).					
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
⁻ S	ee the attached detailed Office action for a list of	of the certified copies not receive	d.					
Attachment			•					
	e of References Cited (PTO-892) (2 pages)	4) Interview Summary	•					
3) 🔯 Inform	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date (5 pages).	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	atent Application (PTO-152)					
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DETAILED ACTION

Specification

- 1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
- 2. The disclosure is objected to because of the following informalities: the abbreviations and acronyms should be spelled out at their first occurrence (DASD, CD-ROM, SQL, ARIMA).

 Appropriate correction is required.

Claim Objections

3. Claims 15-17 are objected to because of the following informalities: the claims are written as dependent upon claim 9; however, the preamble of each claim is directed to a data processing system readable medium, not a method. For this Office action, claims 15-17 have been treated as though they are dependent upon claim 10. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to an abstract idea of modeling an operating parameter.

The claims, to be statutory, must be directed to a practical application within the technological arts.

A practical application is a useful, concrete, and tangible result. In the present application, the process claims do not produce a result that is concrete and tangible. The process performs a calculation, i.e., solves a mathematical problem, and nothing more. Therefore, the claims are not directed to a practical application.

A claim is within the technological arts if it is a mode of treatment of certain materials to produce a given result, an act or series of acts performed upon a subject matter to be transformed and reduced to a different state or thing. A statutory process requires that certain things should be done with certain substances, and in a certain order. MPEP § 2106,IV,B,2. In the present application, the claims are drawn to a process of modeling a parameter. The steps are human activities that can be performed using paper and pencil, and not performed on any subject matter to be transformed or reduced to a different state. Therefore, the claims are not within the technological arts, i.e., directed to nonstatutory subject matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The scope of claim 6 is unclear insofar as it recites (a) at least one more act as part of (b) performing a (i) what-if analysis, (ii) capacity planning for a store, or (iii) inventory control. Step (a) is positively claimed; however steps (b)(i)-(iii) are not positively recited and step (a) is part of step (b). The claim should be clarified as to its scope, for example, step (b)(i)-(iii), step (b) further comprising (a). [Element characters added for purposes of explanation as to the lack of clarity.]

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b. Claim 15 is rejected for the same reasons as claim 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thierauf (book, Decision making through operations research).

Generally, in Chapter 1, Thierauf discloses the process of modeling the operating parameters of a business using a computer because of the increased efficiency over manual modeling. In Chapter 11, Thierauf applies the modeling to inventory control which includes demand analysis using various techniques. In Appendix A, (page 609-620, at 609) Thierauf discloses the process of using matrix algebra to help solve linear programming problems in the operations research field of endeavor.

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The claims are limited only to the mathematical equations, nothing more, and as such are met by the Thierauf reference insofar as Thierauf discloses using matrices and mathematical processes to aid in decision-making. The examiner takes Official notice that the decision as to what variables of an operation are analyzed is within the level of ordinary skill in the operations research field of endeavor and that the analysis of a particular variable is dependent upon the goal of the operation, including the company as a whole, and the desired outcome of the analysis whether it is determining areas within an operation that need improvement or determining areas that achieve maximization of operation goals.

The particular categorization (claim 2) is within the level of ordinary skill in the operations research art as evidenced by the types of inventory control presented in Chapter 11 of Thierauf. Moreover, the application of a matrix analysis to any variable including price change and something other than price change (claim3) is within the purview of a data analyst in the business field, and thus the variable to which matrix algebra is applied is certainly within the level of ordinary skill in the operations research art. The weight of a variable in an operations research matrix analysis (claim 4) is a decision made by one of ordinary skill in the operations research art. Therefore, to use the same matrix (linear equation) to solve a problem as related to different variables is a matter of design choice that is within the level of ordinary skill in the operations research art.

Regarding claims 10-18, the use of computers is noted in Thierauf above. The examiner takes Official notice that the use of readable media having code embodied thereon is common in the computer art. Thus, storing information and instructions on a readable medium would have

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been obvious in order to perform the mathematical calculations on a computer or data processing system.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara L. Graysay whose telephone number is (571) 272-6728. The examiner can normally be reached on Mon - Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tamara L. Graysay

Examiner

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